Traveling Salesman Problem Dennis Shasha Omniheurist Course Computer Science

Description

Given a collection of cities, your job is to have your salesman visit every city <u>at least once</u> and to do so in the cheapest way possible. Salesman may <u>start at any city</u>. The cities will each have three dimensional coordinates. The z coordinate varies the least as most cities are at pretty much the same elevation. The format will be cityid, x-coord, y-coord, z-coord

Here is a typical file.

Your output should simply give a sequence of cities in the order of visit (one line per city) and the total distance traveled. Note that you do NOT have to return to your home city. Distance traveled is calculated based on Euclidean distance. There will be a list of 1000 cities generated the day of the contest.

The architect will specify a precise format and then evaluate each solution.